

ABSTRACT OF THE DISCLOSURE

A regular array and method of forming a substantially regular array of microscopic structures on a surface of a sample is described. A device of the present invention comprises a microscopic layer of at least one first material on a substrate of a second material, wherein the microscopic layer is sufficiently thin that stress fields at the interface of the microscopic layer and the substrate cause formation of separated regions of the first material on the substrate. The microscopic layer on the sample is irradiated by means of a particle beam at an acute angle to influence the direction of alignment of the separated regions and/or the relative position of adjacent the separated regions.